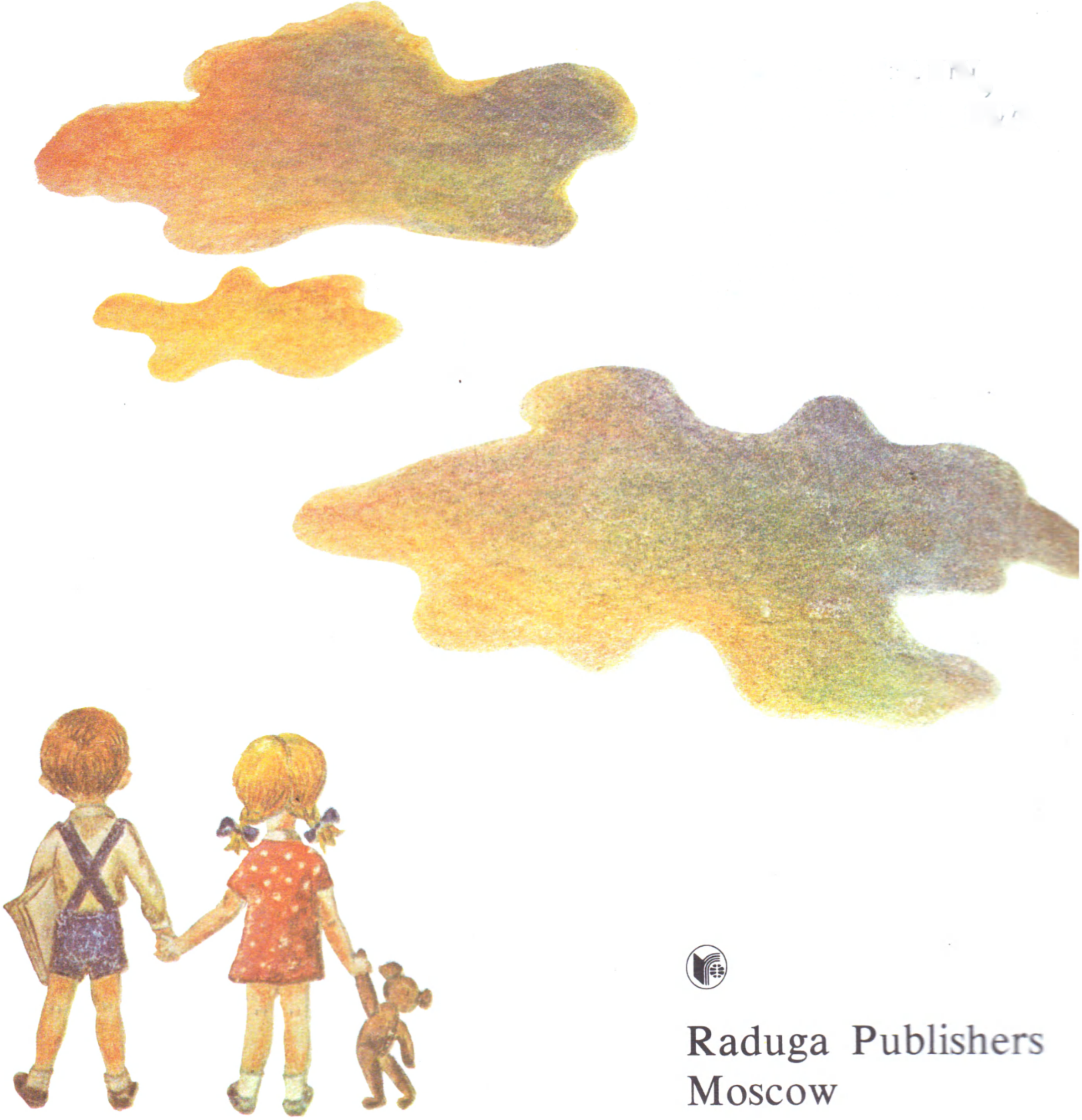

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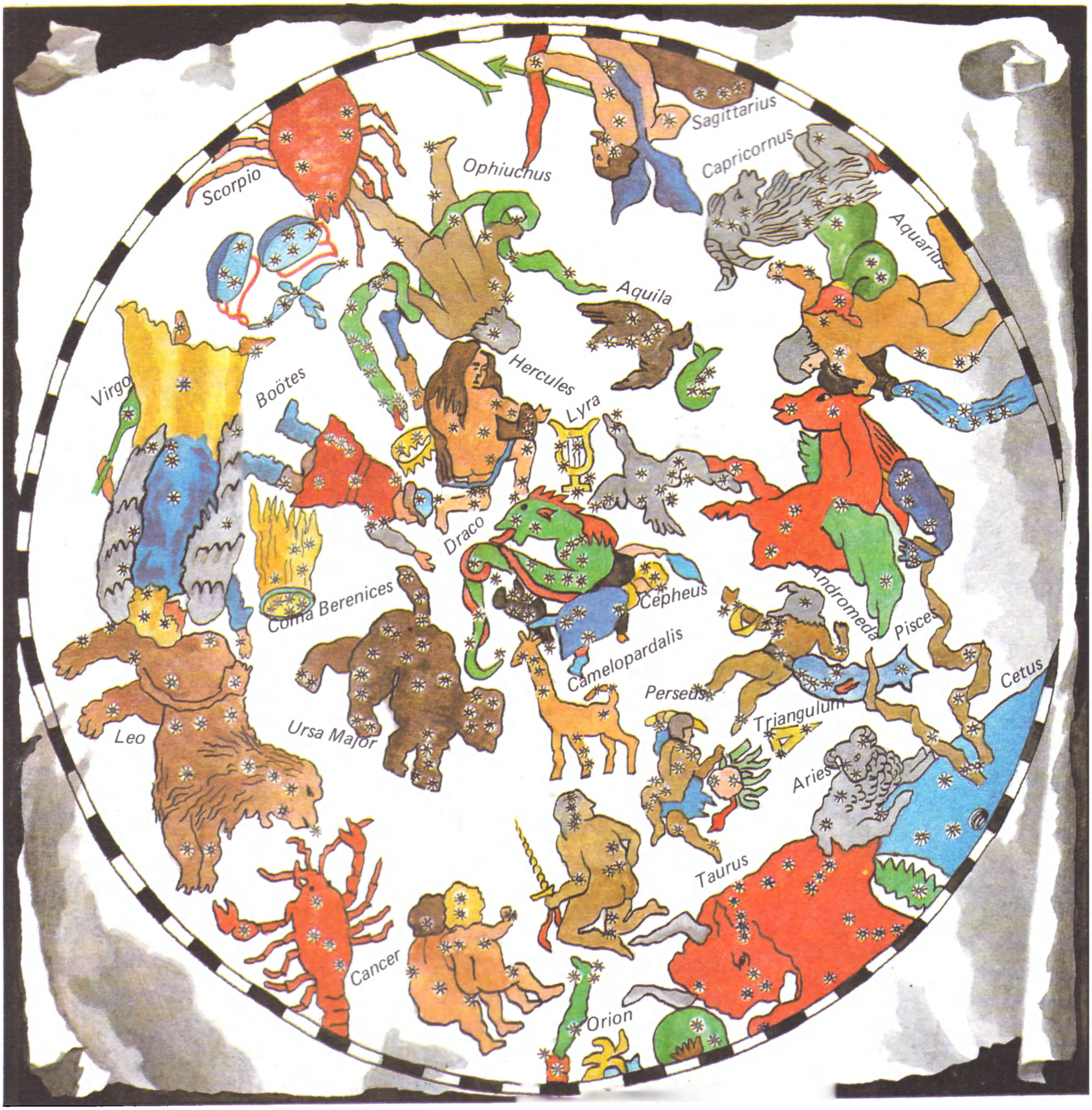
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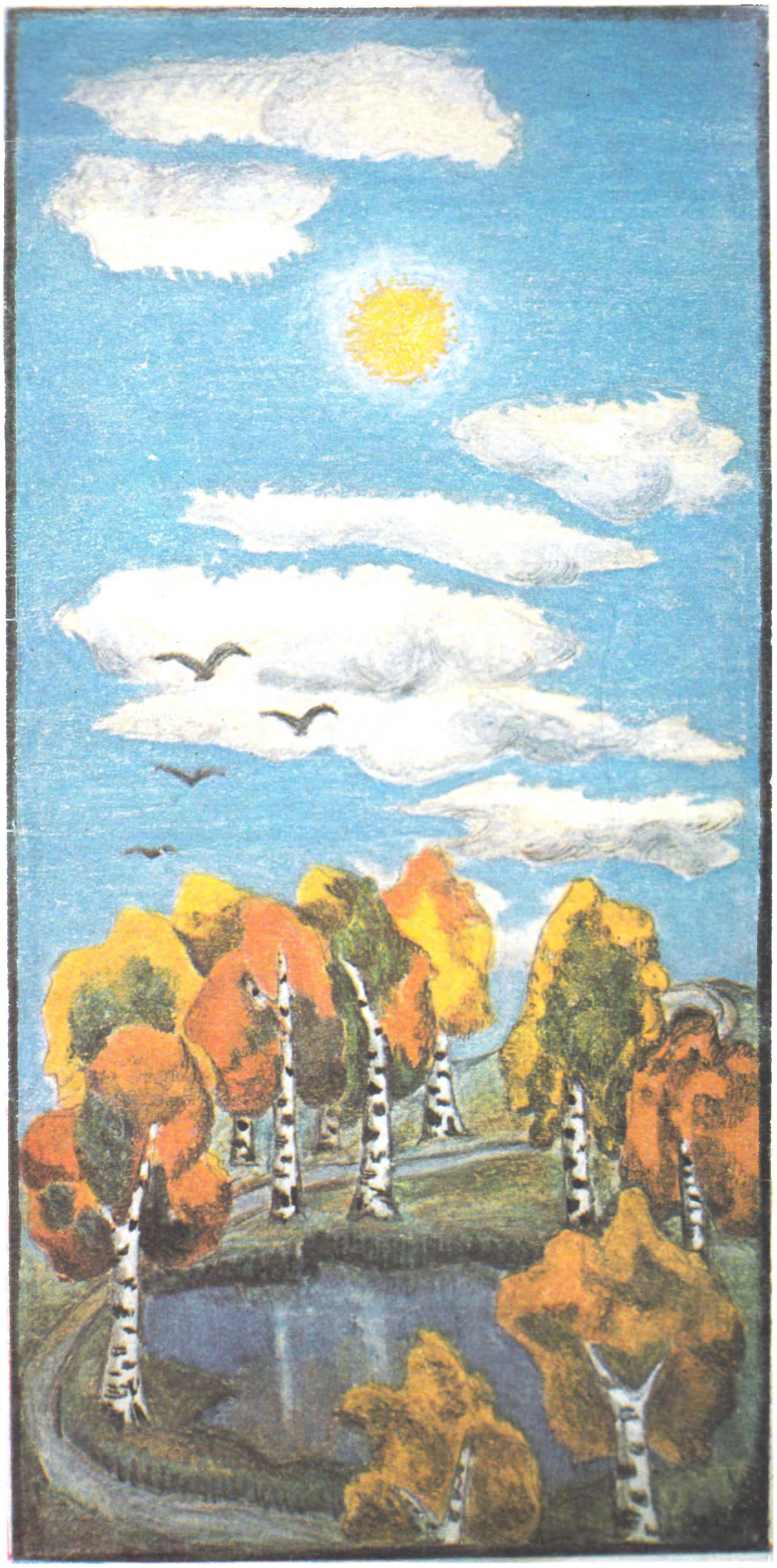
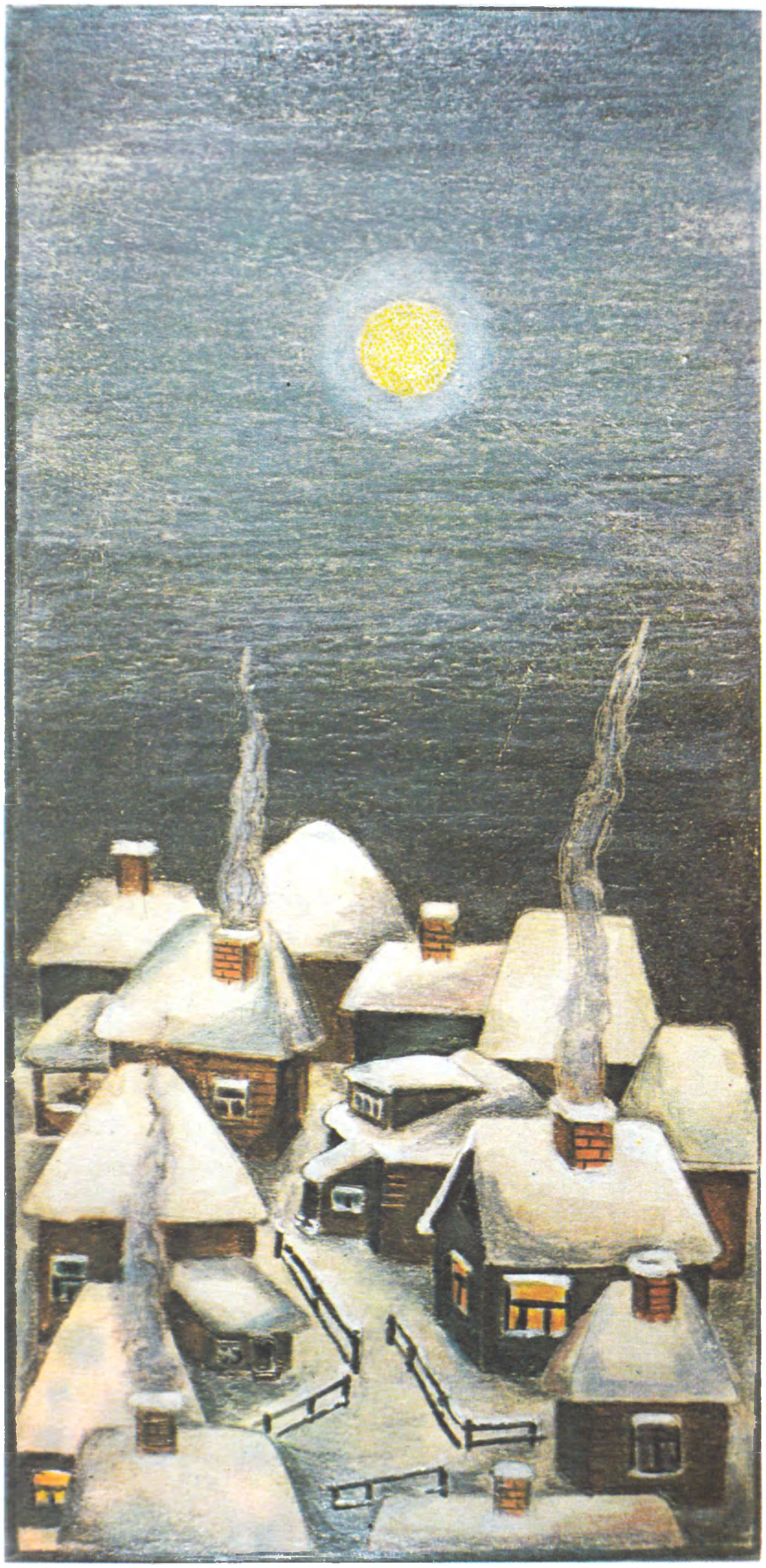
Cepheus
Andromeda
Pisces
Coma Berenices
Camelopardalis
Perseus
Cetus
Triangulum
Leo
Ursa Major
Aries
Taurus
Cancer
Orion

Which Is Bigger, the Sun or the Moon?

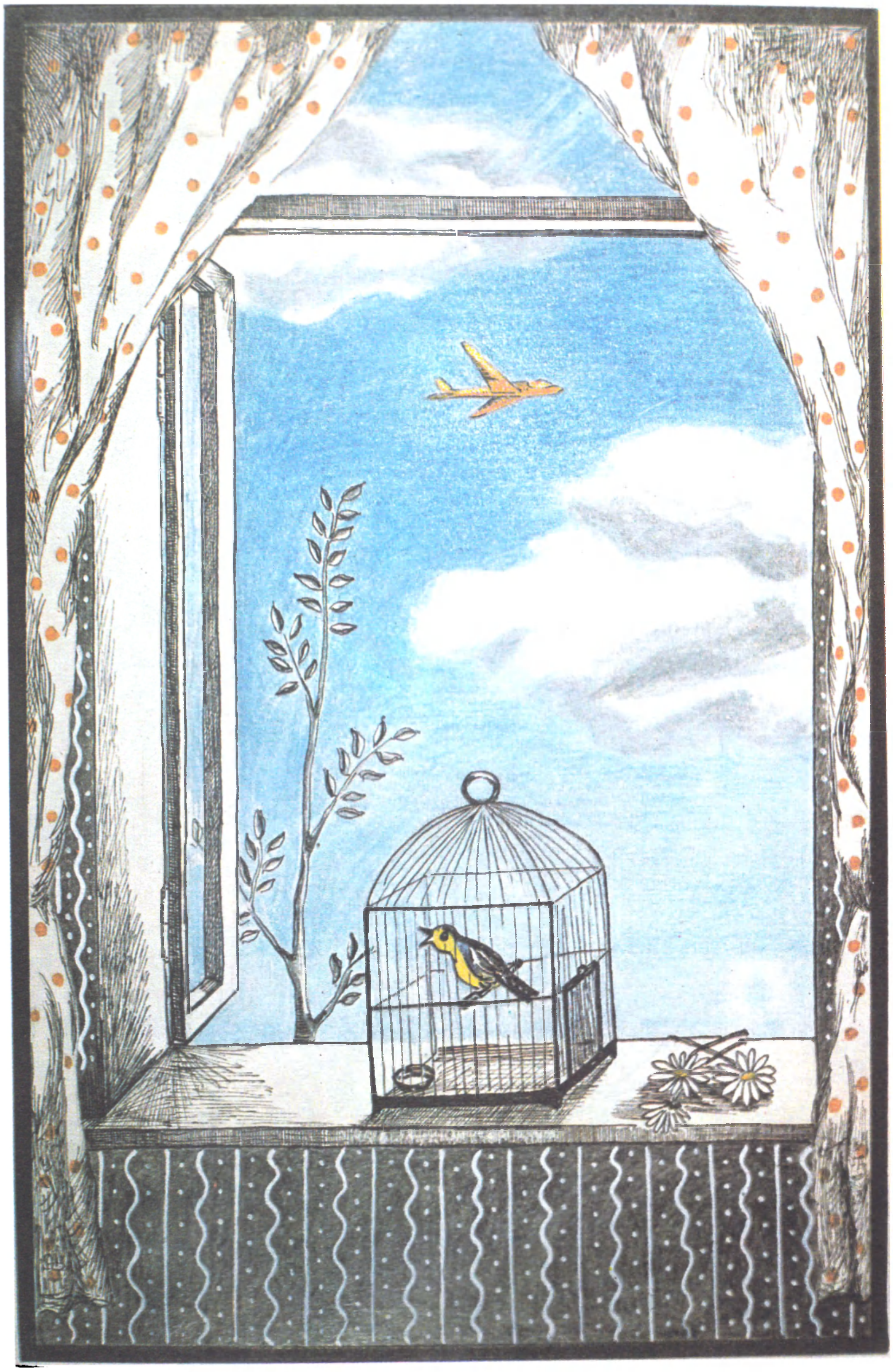




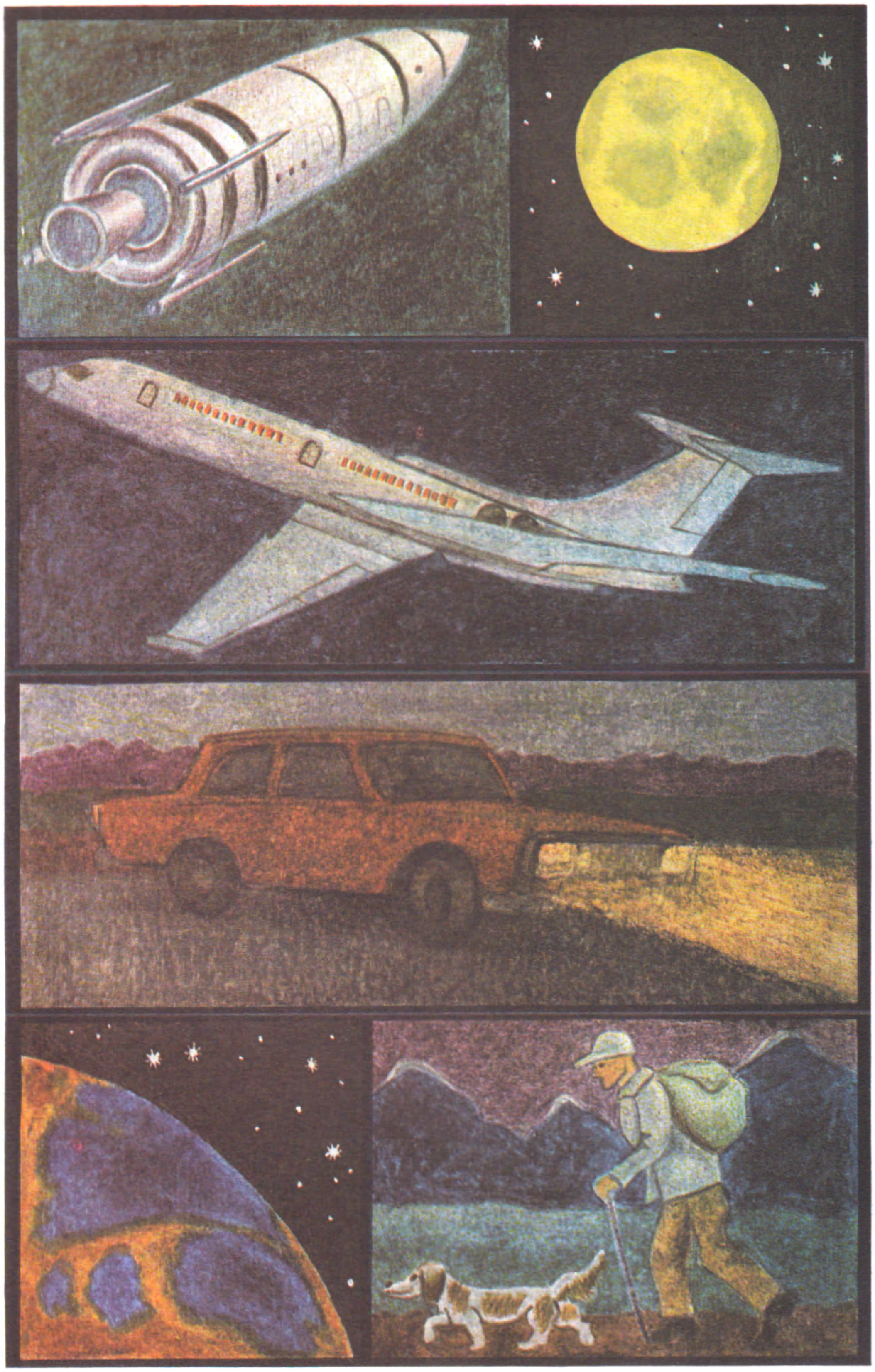
In the sky the Sun and the Moon seem to be the same size.

But everything depends on how far away you are. A big plane flying far in the sky looks just as small as a little bird sitting close by.

The Sun is much farther from us than the Moon. But it is much larger than the Moon.



How Far Is It to the Moon?



If a person walked 30 kilometers a day, he would have to walk 35 years without stopping to get from the Earth to the Moon.

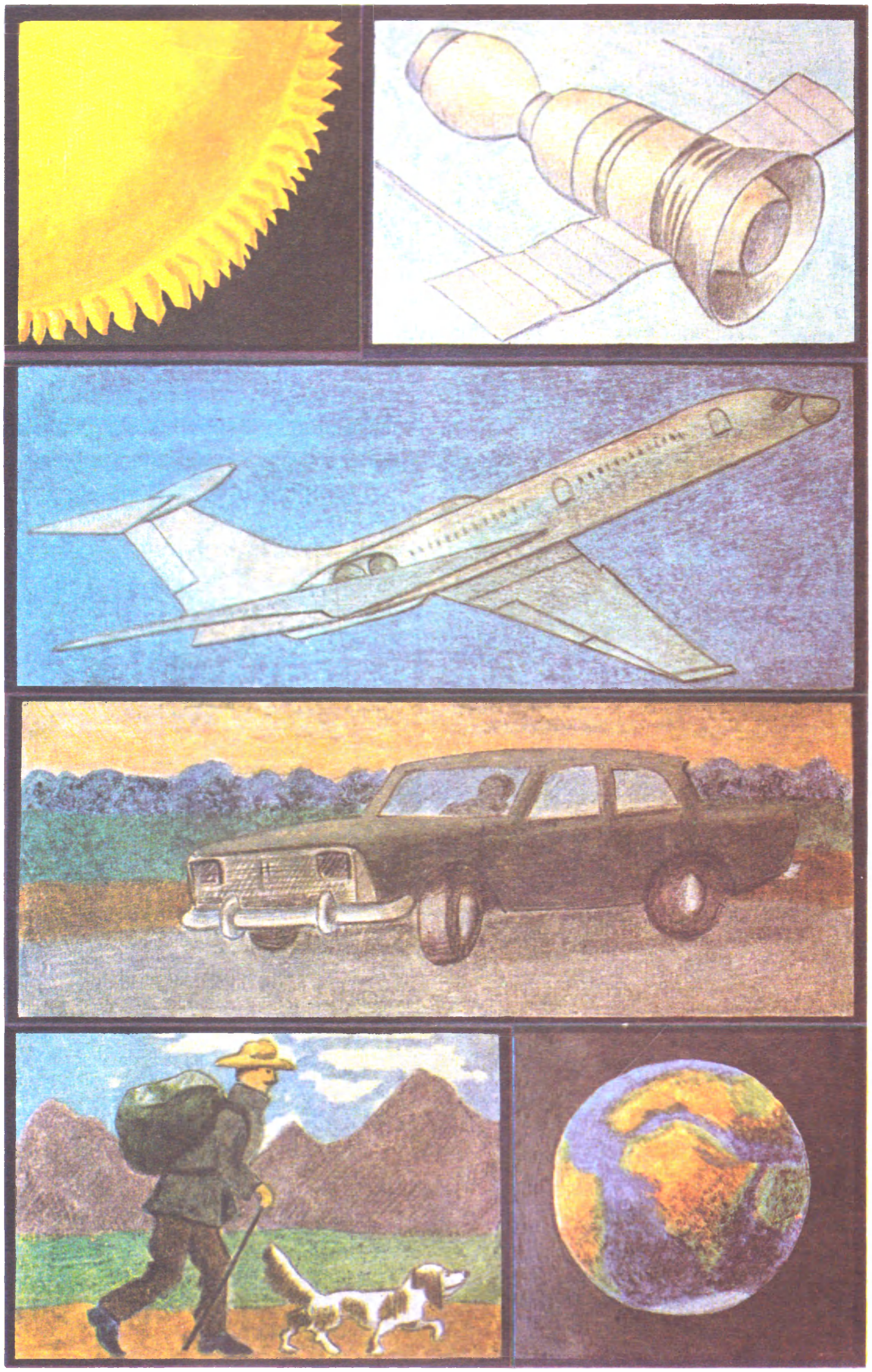
It would take a car, traveling at 80 kilometers an hour, more than six months to cover the same distance. A plane going 900 kilometers an hour could reach the Moon in about three weeks.

Man-made satellites go at speeds from 25 to 30 thousand kilometers an hour. They could make the trip in 12 to 16 hours. Rockets flying to the Moon go slower and reach it in 2 or 3 days.

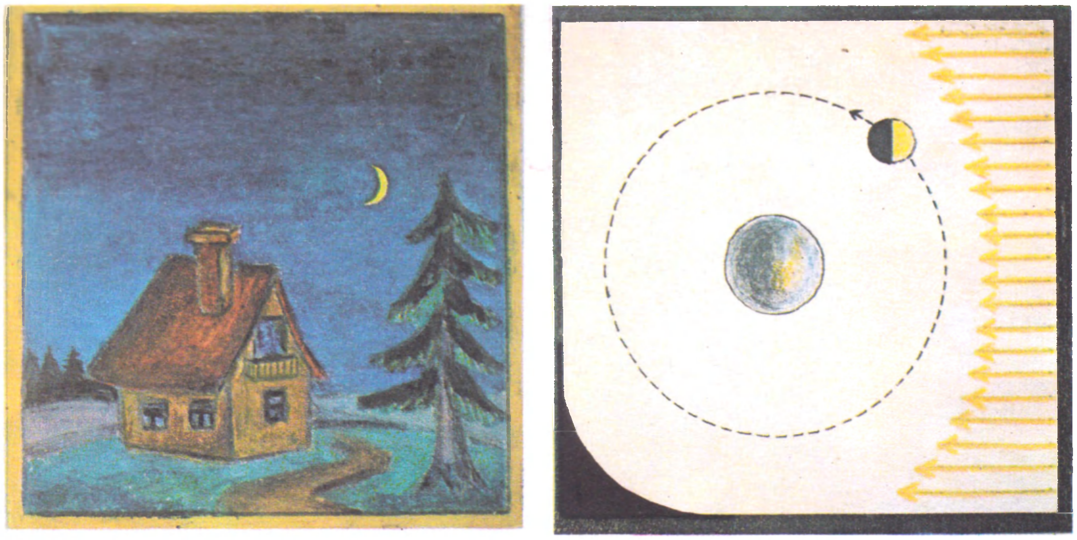
How Far to the Sun?

It is 400 times farther to the Sun than to the Moon.

For a hiker to go from the Earth to the Sun, he would have to walk about 14 thousand years. A car would take 200 years. A plane, about 25 years. Even a man-made satellite would only reach the Sun in 7 or 8 months.



Why Does the Moon Change Shape?



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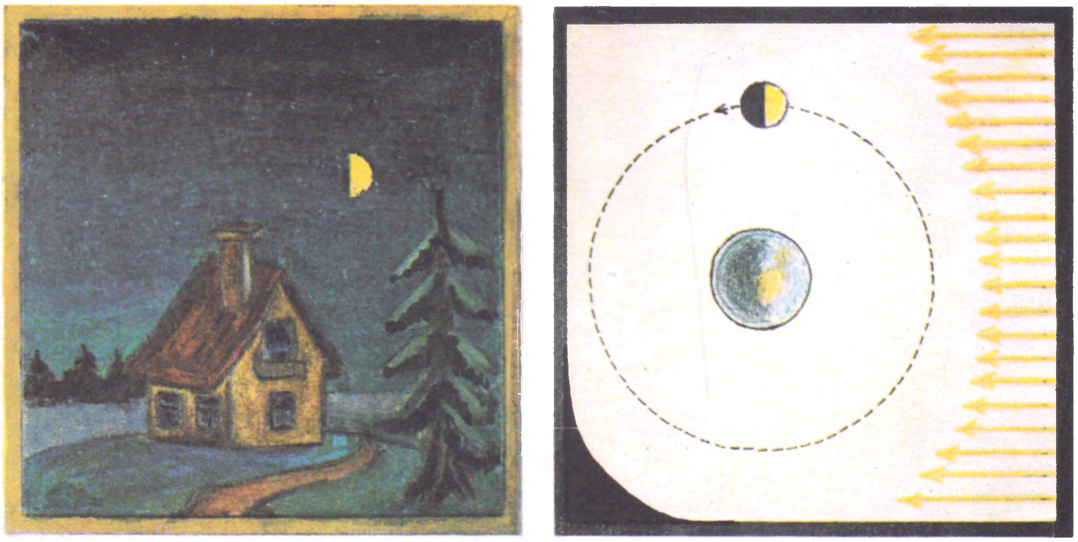

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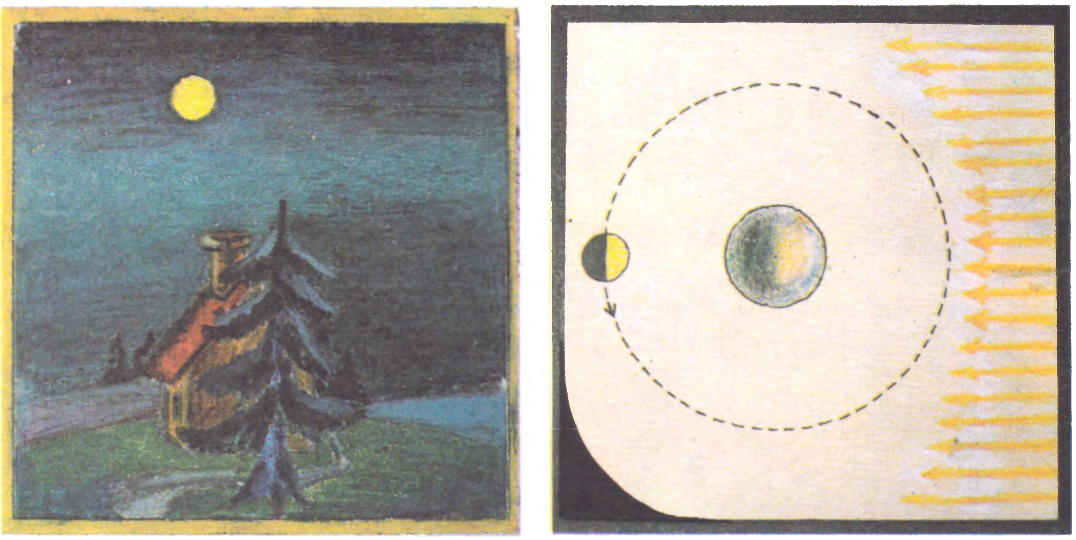

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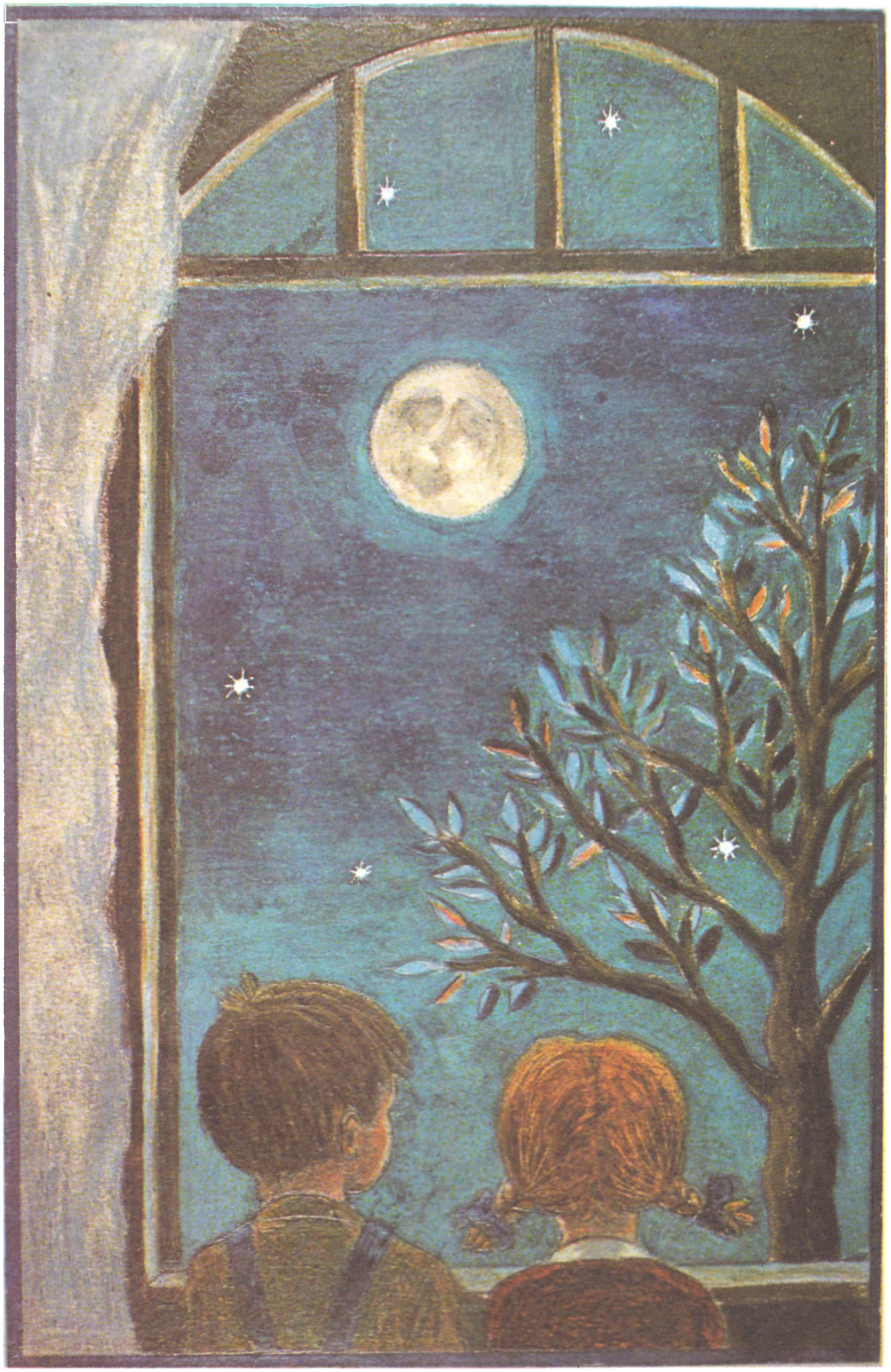
You have probably noticed that the Moon does not always look the same. Its shape changes over the course of a month. We either see a thin sickle shape, or a half circle, or a full Moon. Sometimes we cannot see the Moon at all. Why?

The Moon itself does not shine. We can see it only because it is lit by the Sun. The Sun shines on one half of the Moon and the other half is in darkness. The Moon is the Earth's satellite. It takes one month for it to travel around the Earth.

When the Moon is in the position as shown in drawing 1, on the right, then only the edge of the bright half of the Moon is visible on Earth. We see a thin sliver (Drawing 1, on the left). Each day the sliver gets larger. The Moon seems to be growing. When the Moon is lit up from the side, we see half of the bright side (Drawing 2). As the Moon moves around the Earth it reaches the side of the Earth which is away from the Sun (Drawing 3). Then we see the entire bright side and it looks round. When the Moon moves farther along, it will be lit from the side again. But this time the other side. This is shown

Why Can We See a Face on the Moon?



At full moon, when the Moon is round, you can see a face on it with two eyes, a nose and a mouth.

Through a telescope the Moon looks like the picture on the right. It has dark and light places. If you look at that photograph from far away, the dark spots begin to look like eyes, a nose and a mouth.

The dark spots on the Moon are called seas, but they are not real seas. They have no water.